

CLAIMS

What is claimed is:

- 5 1. A projectile for use with a gun system, comprising:
a fuze;
a projectile body including an open front end and a closed rear end;
wherein the front end of the projectile body is secured to the fuze;
a boom assembly secured to the closed end of the projectile body;
- 10 a center vent tube having a forward end that is secured to the fuze
and seal, and a rearward end that abuts against the rear end of the
projectile body and seal, to form a smoke chamber; and wherein the rear
end of the projectile body includes at least one vent hole in
communication with the smoke chamber.
- 15 2. The projectile according to claim 1, further including at least one
vent plug that fits in the vent hole before impact with a target, and that is
unplugged from the projectile body upon function of the fuze, to allow
smoke that accumulates inside the smoke chamber to be released.
- 20 3. The projectile according to claim 2, wherein the at least one vent
hole includes a plurality of vent holes.
4. The projectile according to claim 3, wherein the plurality of vent
25 holes include four equally spaced apart vent holes.
5. The projectile according to claim 3, wherein the equal number of
vent plugs to the number of vent holes presented.

6. The projectile according to claim 5, wherein the plurality of vent plugs includes four vent plugs.

5 7. The projectile according to claim 5, wherein the center vent tube is cylindrically shaped.

8. The projectile according to claim 7, wherein the center vent tube is open at both ends.

10 9. The projectile according to claim 8, wherein the center vent tube can be in unique shape to simulate appropriate physical properties including CG location, total weight, axial and transversal moments of inertia.

15 10. The projectile according to claim 8, appropriate sealing methods including but not limited to O-rings can be implemented at the ends of the vent tube depending on the needs.